

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER No. 78-97

NPDES PERMIT NO. CA0037401

WASTE DISCHARGE REQUIREMENTS FOR:

ANGEL ISLAND STATE PARK  
DEPARTMENT OF PARKS AND RECREATION  
STATE OF CALIFORNIA  
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

1. The Department of Parks and Recreation, State of California, (hereinafter Discharger) owns and operates Angel Island State Park.
2. The sewerage system on Angel Island includes septic tanks, holding tank and Bay outfalls. Some waste discharges are to Central San Francisco Bay, a water of the United States.
3. The Bay discharges are:
  - a. A 5,000 gallon septic tank receives sewage from toilets next to the wharf at Ayala Cove. A 10,000 gallon septic tank receives the rest of the sewage from Ayala Cove. The sewage from the 2 septic tanks is combined in a holding tank, then pumped through a 3 inch force main to the Bay just off Point Ione.
  - b. At East Garrison, a sewer receives sewage from the rangers' residences. The untreated sewage is discharged through the seawall near the southeastern side of East Garrison.
  - c. A sewer receives sewage from a ranger residence between East Garrison and the firehouse. The untreated sewage is discharged directly to the Bay.
4. On January 15, 1959, the Board adopted Resolution No. 298 prescribing requirements for waste discharged from Angel Island.
5. A Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin was adopted by the Board in April 1975. The Basin Plan contains water quality objectives, treatment requirements and discharge prohibitions.
6. The beneficial uses of Central San Francisco Bay around Angel Island are:
  - a. Navigation
  - b. Water contact recreation
  - c. Non-Contact water recreation

- d. Commercial and sport fishing
- e. Wildlife habitat
- f. Preservation of habitat for rare and endangered species
- g. Marine habitat
- h. Fish migration
- i. Fish spawning
- j. Shellfish harvesting

7. The Basin Plan:

- Requires that all dischargers of waste to water of the United States have a National Pollutant Discharge Elimination System (NPDES) Permit;
- Requires that sewage receive, at least, secondary treatment before discharge to water of the United States; and
- Prohibits discharge of wastewater which has characteristics of concern to beneficial uses at a point at which the wastewater does not receive an initial dilution of at least 10 to 1.

- 8. The discharge of wastes as described in Findings 3.a., 3.b. and 3.c. above is not in compliance with the Basin Plan.
- 9. As this project approval is an NPDES permit, this Board, pursuant to Water Code Section 13389, is not required to comply with the provisions of Chapter 3 of Division 13 of the Public Resources Code (California Environmental Quality Act).
- 10. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 11. The Board, in a public meeting, heard and considered all comments pertaining to the discharges.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provision of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions:

- 1. The discharge of wastewater at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited (receiving water to wastewater flow).
- 2. There shall be no discharge bypass or overflow of untreated wastewater to water of the United States.

B. Effluent Limitations:

- 1. The discharge of wastewater containing constituents in excess of the following limits is prohibited:

| <u>Constituents</u>  | <u>Units</u> | <u>30-day<br/>Average</u> | <u>7-day<br/>Average</u> | <u>Daily<br/>Maximum</u> | <u>Instantaneous<br/>Maximum</u> |
|----------------------|--------------|---------------------------|--------------------------|--------------------------|----------------------------------|
| a. BOD               | mg/l         | 30                        | 45                       | 60                       | --                               |
| b. Suspended Solids  | mg/l         | 30                        | 45                       | 60                       | --                               |
| c. Oil & Grease      | mg/l         | 10                        | --                       | 20                       | --                               |
| d. Chlorine Residual | mg/l         | --                        | --                       | --                       | 0.0                              |
| e. Settleable Matter | ml/l/hr      | 0.1                       | --                       | --                       | 0.2                              |

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20°C) and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).
3. The pH of the discharge shall not exceed 8.5 or be less than 6.5.
4. The waste as discharged shall meet the following limits of quality:

COLIFORM:

The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 per 100 milliliters. Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform bacteria per 100 milliliters when verified by a repeat sample taken within 48 hours.

5. In any representative set of samples the waste as discharged shall meet the following limit of quality:

TOXICITY:

The survival of an acceptable test organism in 96 hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50 percent survival.

6. Representative samples of effluent shall not exceed the following limits more than the percentage of time indicated: (1)

| <u>Constituent</u> | <u>Unit of Measurement</u> | <u>50% of time</u> | <u>10% of time</u> |
|--------------------|----------------------------|--------------------|--------------------|
| Arsenic            | mg/l                       | 0.01               | 0.02               |
| Cadmium            | mg/l                       | 0.02               | 0.03               |
| Total Chromium     | mg/l                       | 0.005              | 0.01               |
| Copper             | mg/l                       | 0.2                | 0.3                |
| Lead               | mg/l                       | 0.1                | 0.2                |
| Mercury            | mg/l                       | 0.001              | 0.002              |
| Nickel             | mg/l                       | 0.1                | 0.2                |
| Silver             | mg/l                       | 0.02               | 0.04               |
| Zinc               | mg/l                       | 0.3                | 0.5                |

| <u>Constituent</u>                              | <u>Unit of Measurement</u> | <u>50% of time</u> | <u>10% of time</u> |
|---|----------------------------|--------------------|--------------------|
| Cyanide   | mg/l                       | 0.1                | 0.2                |
| Phenolic Compounds                              | mg/l                       | 0.5                | 1.0                |
| Total Identifiable Chlorinated Hydrocarbons (2) | mg/l                       | 0.002              | 0.004              |

(1) These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

(2) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

C. Receiving Water Limitations:

1. The discharge of waste shall not cause the following conditions to exist in water of the United States at any place:

- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
- b. Bottom deposits or aquatic growths;
- c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
- d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in water of the United States in any place within one foot of the water surface:

- a. Dissolved oxygen      5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
- b. Dissolved sulfide      0.1 mg/l maximum.
- c. pH      Variation from natural ambient pH by more than 0.2 pH units.

- d. Un-ionized Ammonia 0.025 mg/l annual median  
as N 0.4 mg/l maximum
- e. Nutrients 50 µg/l chlorophyll a maximum. When background levels exceed this requirement, then this discharge shall not add further nutrients.

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions:

1. The requirements prescribed by this Order supersede the requirements prescribed by Resolution No. 298 and Resolution No. 298 is rescinded.
2. The Discharger shall comply with the following time schedule to assure compliance with all Prohibitions, Effluent Limitations and Receiving Water Limitations in this Order:

| <u>Task</u>   | <u>Compliance Date</u> |
|---|------------------------|
| (1) Finalize Facilities Plan  | March 1, 1979          |
| (2) Finalize Environmental Impact Report  | March 1, 1979          |
| (3) Submit complete Report of Waste Discharge   | April 1, 1979          |
| (4) Begin design  | June 1, 1979           |
| (5) Advertise for bids  | December 15, 1979      |
| (6) Award contract  | March 1, 1980          |
| (7) Complete construction   | March 1, 1981          |
| (8) Achieve and maintain full compliance with this Order or the waste discharge requirements adopted by this Board subsequent to the discharger's filing the Report of Waste Discharge required in Task (3) above | April 1, 1981          |

3. The Discharger is required to submit to the Regional Board by the fifteenth day of every month, beginning December 15, 1978, a report, under penalty of perjury, on progress toward compliance with this Order. If noncompliance or threatened noncompliance is reported, the reasons for noncompliance and an estimated completion date shall be provided.
4. The Discharger shall file with the Board technical reports on self-monitoring work performed according to detailed specifications as directed by the Executive Officer.
5. The Discharger shall comply with the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977.
6. This Order expires June 1, 1981.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 21, 1978.

FRED H. DIERKER  
Executive Officer

Attachments:

Standard Provisions, Reporting Requirements,  
and Definitions, dated April 1977